IN THE CLAIMS

1. (Original) A glycodendrimer comprising carbohydrate moieties covalently linked to a carboxylic terminated dendrimer.

2 - 47 (Cancelled)

48. (New) The glycodendrimer of claim 1 wherein the carboxylic terminated dendrimer is a carboxylic terminated poly(amidoamine) dendrimer (PAMAM dendrimer).

49. (New) The glycodendrimer of claim 1 wherein the dendrimer comprises at least one generation of dendrimer selected from the group consisting of dendrimers of generation 1.5, generation 2.5, generation 3.5, generation 4.5, generation 5.5, generation 6.5, generation 7.5, generation 8.5, and generation 9.5.

50. (New) The glycodendrimer of claim 1 wherein the dendrimer comprises a dendrimer generation 2.5.

51. (New) The glycodendrimer of claim 1 wherein the dendrimer comprises a dendrimer generation 3.5.

52. (New) The glycodendrimer of claim 1 wherein at least one carbohydrate moiety is selected from the group consisting of a monosaccharide, a disaccharide, a trisaccharide, an oligosaccharide, and a polysaccharide.

53. (New) The glycodendrimer of claim 1 wherein at least one carbohydrate moiety comprises at least one amine group.

54. (New) The glycodendrimer of claim 1 where at least one carbohydrate moiety is selected from the group consisting of an amino sugar and a sulphated amino sugar.

55. (New) The glycodendrimer of claim 54 further comprising a modified amino sugar.

56. (New) The glycodendrimer of claim 54 wherein the modified amino sugar is N-acylated.

57. (New) The glycodendrimer of claim 54 further comprising a modified sulphated amino sugar.

58. (New) The glycodendrimer of claim 54 wherein the modified sulphated amino sugar is N-acylated.

59. (New) The glycodendrimer of claim 1 wherein at least one carbohydrate moiety is selected from the group consisting of glucosamine, glucosamine sulphate, N-acetyl glucosamine, and N-acetyl glucosamine sulphate.

60. (New) The glycodendrimer of claim 59 wherein the glucosamine sulphate is selected from the group consisting of glucosamine 6-sulphate, glucosamine 3,6-disulphate, and glucosamine 3,4,6-trisulphate; and the N-acetyl glucosamine sulphate is selected from the group consisting of N-acetyl glucosamine 6-sulphate, N-acetyl glucosamine 3,6-disulphate, and N-acetyl glucosamine 3,4,6-trisulphate.

61. (New) The glycodendrimer of claim 1 that is effective for the treatment of a disease or condition associated with inflammation, the disease selected from the group consisting of, severe sepsis, septic shock, the systemic inflammatory response associated with sepsis, rheumatological disease, eczema, psoriasis, contraction of tissues during wound healing, excessive scar formation during wound healing, transplant rejection, and graft versus host disease.

62. (New) The glycodendrimer of claim 1 that is effective for the treatment of a disease or condition associated with inflammation, the disease selected from the group consisting of, rheumatoid arthritis, juvenile chronic arthritis, psoriatic arthritis, reactive arthritis occurring after an infection, acute ankylosing spondylitis, arthritis associated with inflammatory bowel disease, Behcet's disease including Behcet's disease with panuveitis and/or retinal vasculitis, inflammatory bowel disease (Crohn's disease, ulcerative colitis), and a disease associated with metastatic tumour cell growth.

63. (New) The glycodendrimer of claim 61 wherein the transplant is selected from the group consisting of a corneal, kidney, heart, lung, heart-lung, skin, liver, gut, and bone marrow transplant.

64. (New) The glycodendrimer of claim 61 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a lipopolysaccharide from a gram negative bacterium.

65. (New) The glycodendrimer of claim 61 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a superantigen toxin from a gram positive bacterium.

66. (New) A pharmaceutical formulation comprising the glycodendrimer of claim 1 and a pharmaceutically acceptable carrier.

67. (New) The pharmaceutical formulation of claim 66 wherein the concentration of the glycodendrimer is from about 2.5 μg/ml to about 2,500 μg/ml.

68. (New) The pharmaceutical formulation of claim 67 wherein the concentration of the glycodendrimer is from about 25 μg/ml to about 250 μg/ml.

69. (New) The pharmaceutical formulation of claim 66 that is effective for the treatment of a disease or condition associated with inflammation, the disease selected from the group consisting of severe sepsis, septic shock, the systemic inflammatory response associated with sepsis, rheumatological disease, eczema, psoriasis, contraction of tissues during wound healing, excessive scar formation during wound healing, transplant rejection, and graft versus host disease.

70. (New) The pharmaceutical formulation of claim 66 that is effective for the treatment of a disease or condition associated with inflammation, the disease selected from the group consisting of rheumatoid arthritis, juvenile chronic arthritis, psoriatic arthritis, reactive arthritis occurring after an infection, acute ankylosing spondylitis,

arthritis associated with inflammatory bowel disease, Behcet's disease including Behcet's disease with panuveitis and/or retinal vasculitis, inflammatory bowel disease (Crohn's disease, ulcerative colitis), and a disease associated with metastatic tumour cell growth.

71. (New) The pharmaceutical formulation of claim 69 wherein the transplant is selected from the group consisting of a corneal, kidney, heart, lung, heart-lung, skin, liver, gut, and bone marrow transplant.

72. (New) The pharmaceutical formulation of claim 69 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a lipopolysaccharide from a gram negative bacterium.

73. (New) The pharmaceutical formulation of claim 69 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a superantigen toxin from a gram positive bacterium.

74. (New) A method for administering the glycodendrimer of claim 1, the method comprising administering the glycodendrimer using an administration selected from the group consisting of intravenously, intra-arterially, into the lymphatic circulation, orally, intraperitoneally, topically, buccally, rectally, to the surface of the skin, transdermally, subcutaneously, intramuscularly, into the joint space, intranasally, intravitreally, by aerosol, and by pulmonary administration.

75. (New) A method for administering the glycodendrimer of claim 1, the method comprising administering the glycodendrimer using an administration selected from the group consisting of administration directly to the eye as eye drops, by deposition of a pellet in or around the eye, by injection into any chamber within the eye, and by direct infusion through an organ.

76. (New) A method for administering the pharmaceutical formulation of claim 66, the method comprising administering the pharmaceutical formulation using an administration selected from the group consisting of intravenously, intra-arterially, into the lymphatic circulation, orally, intraperitoneally, topically, buccally, rectally, to

the surface of the skin, transdermally, subcutaneously, intramuscularly, into the joint space, intranasally, intravitreally, by aerosol, and by pulmonary administration.

77. (New) A method for administering the pharmaceutical formulation of claim 66, the method comprising administering the pharmaceutical formulation using an administration selected from the group consisting of administration directly to the eye as eye drops, by deposition of a pellet in or around the eye, by injection into any chamber within the eye, and by direct infusion through an organ.

78. (New) The glycodendrimer of claim 1 wherein the glycodendrimer is selected from the group consisting of dendrimer generation 3.5-glucosamine, dendrimer generation 3.5-glucosamine 6-sulphate, dendrimer generation 3.5-N-acetylglucosamine, dendrimer generation 3.5-N-acetylglucosamine sulphate, dendrimer generation 3.5-mannosamine, dendrimer generation 3.5-mannosamine sulphate, dendrimer generation 3.5-N-acetylmannosamine, dendrimer generation 3.5-N-acetylmannosamine sulphate, dendrimer generation 2.5-glucosamine, dendrimer generation 2.5-glucosamine 6-sulphate, dendrimer generation 2.5-N-acetylglucosamine, dendrimer generation 2.5-N-acetylglucosamine sulphate, dendrimer generation 2.5-mannosamine, dendrimer generation 2.5-mannosamine sulphate, dendrimer generation 2.5-N-acetylmannosamine, and dendrimer generation 2.5-N-acetylmannosamine sulphate.

79. (New) The glycodendrimer as claimed in claim 78 wherein the dendrimer is a PAMAM dendrimer.

80. (New) The glycodendrimer of claim 78 that is effective for the treatment of a disease or condition associated with inflammation, the disease selected from the group consisting of severe sepsis, septic shock, the systemic inflammatory response associated with sepsis, rheumatological disease, eczema, psoriasis, contraction of tissues during wound healing, excessive scar formation during wound healing, transplant rejection, and graft versus host disease.

81. (New) The glycodendrimer of claim 78 that is effective for the treatment of a disease or condition associated with inflammation, the disease selected from the group

consisting of rheumatoid arthritis, juvenile chronic arthritis, psoriatic arthritis, reactive arthritis occurring after an infection, acute ankylosing spondylitis, arthritis associated with inflammatory bowel disease, Behcet's disease including Behcet's disease with panuveitis and/or retinal vasculitis, inflammatory bowel disease (Crohn's disease, ulcerative colitis), and a disease associated with metastatic tumour cell growth.

82. (New) The glycodendrimer of claim 80 wherein the transplant is selected from the group consisting of a corneal, kidney, heart, lung, heart-lung, skin, liver, gut, and bone marrow transplant.

83. (New) The glycodendrimer of claim 80 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a lipopolysaccharide from a gram negative bacterium.

84. (New) The glycodendrimer of claim 80, wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a superantigen toxin from a gram positive bacterium.

85. (New) A pharmaceutical formulation comprising the glycodendrimer of claim 78 and a pharmaceutically acceptable carrier.

86. (New) The pharmaceutical formulation of claim 85 wherein the concentration of the glycodendrimer is from about 2.5 μg/ml to about 2,500 μg/ml.

87. (New) The pharmaceutical formulation of claim 86 wherein the concentration of the glycodendrimer is from about 25 μg/ml to about 250 μg/ml.

88. (New) A method for administering the glycodendrimer of claim 78, the method comprising administering the glycodendrimer using an administration selected from the group consisting of intravenously, intra-arterially, into the lymphatic circulation, orally, intraperitoneally, topically, buccally, rectally, to the surface of the skin, transdermally, subcutaneously, intramuscularly, into the joint space, intranasally, intravitreally, by aerosol, and by pulmonary administration.

89. (New) A method for administering the glycodendrimer of claim 78, the method comprising administering the glycodendrimer using an administration selected from the group consisting of administration directly to the eye as eye drops, by deposition of a pellet in or around the eye, by injection into any chamber within the eye, and by direct infusion through an organ.

90. (New) A method for administering the pharmaceutical formulation of claim 85, the method comprising administering the glycodendrimer using an administration selected from the group consisting of intravenously, intra-arterially, into the lymphatic circulation, orally, intraperitoneally, topically, buccally, rectally, to the surface of the skin, transdermally, subcutaneously, intramuscularly, into the joint space, intranasally, intravitreally, by aerosol, and by pulmonary administration.

91. (New) A method for administering the pharmaceutical formulation of claim 85, the method comprising administering the glycodendrimer using an administration selected from the group consisting of administration directly to the eye as eye drops, by deposition of a pellet in or around the eye, by injection into any chamber within the eye, and by direct infusion through an organ.

92. (New) The glycodendrimer of claim 1 that is effective to decrease chemokine levels of a mammal relative to control mammals having a disease in which chemokines are increased.

93. (New) The glycodendrimer of claim 1 that is effective to decrease cytokine levels of a mammal relative to control mammals having a disease in which cytokines are increased.

94. (New) The glycodendrimer of claim 1 that is effective to decrease angiogenesis of a mammal relative to control mammals having a disease in which angiogenesis is increased.

95. (New) The glycodendrimer of claim 78 that is effective to decrease chemokine levels of a mammal relative to control mammals having a disease in which chemokines are increased.

96. (New) The glycodendrimer of claim 78 that is effective to decrease cytokine levels of a mammal relative to control mammals having a disease in which cytokines are increased.

97. (New) The glycodendrimer of claim 78 that is effective to decrease angiogenesis of a mammal relative to control mammals having a disease in which angiogenesis is increased.

98. (New) The pharmaceutical formulation of claim 85 that is effective for the treatment of a disease or condition associated with inflammation, the disease selected from the group consisting of severe sepsis, septic shock, the systemic inflammatory response associated with sepsis, rheumatological disease, eczema, psoriasis, contraction of tissues during wound healing, excessive scar formation during wound healing, transplant rejection, and graft versus host disease.

99. (New) The pharmaceutical formulation of claim 85 that is effective for the treatment of a disease or condition associated with inflammation, the disease selected from the group consisting of rheumatoid arthritis, juvenile chronic arthritis, psoriatic arthritis, reactive arthritis occurring after an infection, acute ankylosing spondylitis, arthritis associated with inflammatory bowel disease, Behcet's disease including Behcet's disease with panuveitis and/or retinal vasculitis, inflammatory bowel disease (Crohn's disease, ulcerative colitis), and a disease associated with metastatic tumour cell growth.

100. (New) The pharmaceutical formulation of claim 98 wherein the transplant is selected from the group consisting of a corneal, kidney, heart, lung, heart-lung, skin, liver, gut, and bone marrow transplant.

101. (New) The pharmaceutical formulation of claim 98 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a lipopolysaccharide from a gram negative bacterium.

102. (New) The pharmaceutical formulation of claim 98 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a superantigen toxin from a gram positive bacterium.

103. (New) A method of treating a subject to treat or prevent a disease or condition the method comprising administering to the subject an amount of a glycodendrimer of claim 1 in an amount that is effective to treat a disease, the disease selected from the group consisting of a disease in which chemokines are increased, a disease in which cytokines are increased, a disease in which angiogenesis is increased, severe sepsis, septic shock, the systemic inflammatory response associated with sepsis, rheumatological disease, eczema, psoriasis, contraction of tissues during wound healing, excessive scar formation during wound healing, transplant rejection, and graft versus host disease.

104. (New) The method of claim 103 wherein the transplant is selected from the group consisting of a corneal, kidney, heart, lung, heart-lung, skin, liver, gut, and bone marrow transplant.

105. (New) The method of claim 103 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a lipopolysaccharide from a gram negative bacterium.

106. (New) The method of claim 103 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a superantigen toxin from a gram positive bacterium.

107. (New) A method of treating a subject to treat or prevent a disease or condition comprising administering to the subject an amount of a glycodendrimer of claim 1 in an amount that is effective to treat a disease selected from the group consisting of rheumatoid arthritis, juvenile chronic arthritis, psoriatic arthritis, reactive arthritis

occurring after an infection, acute ankylosing spondylitis, arthritis associated with inflammatory bowel disease, Behcet's disease including Behcet's disease with panuveitis and/or retinal vasculitis, inflammatory bowel disease (Crohn's disease, ulcerative colitis), and a disease associated with metastatic tumour cell growth.

108. (New) A process for preparing a glycodendrimer of claim 1 comprising covalently linking an amino functionalised carbohydrate to a carboxylic terminated dendrimer, wherein the covalent linkage is achieved by the use of a coupling reagent.

109. (New) The process of claim 108 wherein the coupling reagent is a carbodiimide coupling reagent.

110. (New) The process of claim 109 wherein the coupling reagent is 1-ethyl-3- (3-dimethylaminopropyl) carbodiimide hydrochloride.

111. (New) The process of claim 108 wherein the amino functionalised carbohydrate is selected from the group consisting of a monosaccharide, a disaccharide, a trisaccharide, an oligosaccharide, and a polysaccharide.

112. (New) The process of claim 111 wherein the carbohydrate is functionalised with at least one reactive amine group.

113. (New) The process of claim 112 wherein the amine group is a primary amine group.

114. (New) The process of claim 108, wherein the carbohydrate is selected from the group consisting of glucosamine, sulfated glucosamine, mannosamine, sulphated mannosamine, galactosamine, sulfated galactosamine, N-acetyl glucosamine, sulfated N-acetyl glucosamine, N-acetyl mannosamine, sulphated N-acetyl mannosamine, N-acetyl galactosamine, and sulfated N-acetyl galactosamine.

115. (New) The process of claim 114, wherein the sulphated glucosamine is selected from the group consisting of D-glucosamine 6-sulphate, D-glucosamine 3,6,-disulphate, D-glucosamine 3,4, 6-trisulphate, D-glucosamine 3-sulphate, D-

glucosamine 4-sulphate, D-glucosamine 3,4-disulphate, and D-glucosamine 4,6-disulphate.

116. (New) The process of claim 108 carried out at a temperature not greater than 40°C.

117. (New) The process of claim 108 carried out without the application of an external, additional energy source.

118. (New) The process of claim 108 carried out in aqueous solution.

119. (New) A method of treating a subject to treat or prevent a disease or condition comprising administering to the subject an amount of a glycodendrimer of claim 78 in an amount that is effective to treat a disease selected from the group consisting of a disease in which chemokines are increased, a disease in which cytokines are increased, a disease in which angiogenesis is increased, severe sepsis, septic shock, the systemic inflammatory response associated with sepsis, rheumatological disease, eczema, psoriasis, contraction of tissues during wound healing, excessive scar formation during wound healing, transplant rejection, and graft versus host disease.

120. (New) The method of claim 119 wherein the transplant is selected from the group consisting of a corneal, kidney, heart, lung, heart-lung, skin, liver, gut, and bone marrow transplant.

121. (New) The method of claim 119 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a lipopolysaccharide from a gram negative bacterium.

122. (New) The method of claim 119 wherein severe sepsis, septic shock, or systemic inflammatory response associated with sepsis is caused by a superantigen toxin from a gram positive bacterium.

123. (New) A method of treating a subject to treat or prevent a disease or condition comprising administering to the subject an amount of a glycodendrimer of claim 78 in an amount that is effective to treat a disease selected from the group consisting of rheumatoid arthritis, juvenile chronic arthritis, psoriatic arthritis, reactive arthritis occurring after an infection, acute ankylosing spondylitis, arthritis associated with inflammatory bowel disease, Behcet's disease including Behcet's disease with panuveitis and/or retinal vasculitis, inflammatory bowel disease (Crohn's disease, ulcerative colitis), and a disease associated with metastatic tumour cell growth.

124. (New) A process for preparing a glycodendrimer of claim 78 comprising covalently linking an amino functionalised carbohydrate to a carboxylic terminated dendrimer, wherein the covalent linkage is achieved by the use of a coupling reagent.

125. (New) The process of claim 124 wherein the coupling reagent is a carbodiimide coupling reagent.

126. (New) The process of claim 125 wherein the coupling reagent is 1-ethyl-3- (3-dimethylaminopropyl) carbodiimide hydrochloride.

127. (New) The process of claim 124 wherein the amino functionalised carbohydrate is selected from the group consisting of a monosaccharide, a disaccharide, a trisaccharide, an oligosaccharide, and a polysaccharide.

128. (New) The process of claim 127 wherein the carbohydrate is functionalised with at least one reactive amine group.

129. (New) The process of claim 128 wherein the amine group is a primary amine group.

130. (New) The process of claim 124 wherein the carbohydrate is selected from the group consisting of glucosamine, sulfated glucosamine, mannosamine, sulphated mannosamine, galactosamine, sulfated galactosamine, N-acetyl glucosamine, sulfated N-acetyl glucosamine, N-acetyl mannosamine, sulphated N-acetyl mannosamine, N-acetyl galactosamine, and sulfated N-acetyl galactosamine.

131. (New) The process of claim 130 wherein the sulphated glucosamine is selected from the group consisting of D-glucosamine 6-sulphate, D-glucosamine 3,6,-disulphate, D-glucosamine 3,4, 6-trisulphate, D-glucosamine 3-sulphate, D-glucosamine 4-sulphate, D-glucosamine 3,4-disulphate, and D-glucosamine 4,6-disulphate.

132. (New) The process of claim 124 carried out at a temperature not greater than 40°C.

133. (New) The process of claim 124 carried out without the application of an external, additional energy source.

134. (New) The process of claim 124 carried out in aqueous solution.

135. (New) A method for preparing a tissue or organ for transplantation so as to reduce probability of tissue transplant rejection or organ transplant rejection comprising selecting a tissue or organ for transplantation, and exposing the tissue or organ selected for transplantation with a glycodendrimer of claim 1 *in vitro* before transplantation.

136. (New) The method as claimed in claim 135 wherein the tissue or organ is a cornea.

137. (New) A method for preparing a tissue or organ for transplantation so as to reduce probability of tissue transplant rejection or organ transplant rejection comprising selecting a tissue or organ for transplantation, and exposing the tissue or organ selected for transplantation with a glycodendrimer of claim 78 *in vitro* before transplantation.

138. (New) The method as claimed in claim 137 wherein the tissue or organ is a cornea.

139. (New) A process for preparing a biologically active molecule covalently linked to an anionic dendrimer, the process comprising reacting the dendrimer with the biologically active molecule in the presence of a carbodiimide coupling agent.